

REMARKS

In the June 16, 2003 Office Action, of pending claims 1-25, claims 17-22 are rejected under 35 U.S.C. §103(a) as being obvious and claims 1-16 and 23-25 are rejected under nonstatutory double patenting.

By this Amendment, claims 12, 16 and 17 are amended, leaving claims 1-25 pending with claims 1, 13, 17 and 23 being independent.

Reconsideration and allowance of the above-identified application are respectfully requested.

Rejections Under 35 U.S.C. §103(a)

Claims 17-22 stand rejected under 35 U.S.C. §103(a) as being unpatentable over WO 87/07165 to Sklar et al. in view of U.S. Patent No. 5,318,047 to Davenport et al.

Applicant submits that this combination of references does not disclose, teach or suggest all the elements of amended independent claim 17. Specifically, neither the Sklar reference nor the Davenport patent discloses, teaches or suggests an ultrashort pulse laser *used to separate* the internal area of the cornea offset from the main optical axis into first and second internal surfaces to form a corneal flap. Furthermore, the combination does not disclose, teach or suggest inserting an implant under a corneal flap.

The Action states that the Sklar reference discloses all the elements of claims 17-22, except the ocular implant. For the use of the implant, the Action relies on the Davenport patent,

stating that it would have been obvious to one of ordinary skill in the art to modify the Sklar technique, since the corneal implant could be used on patients, which require an optical correction too great to be provided by laser surgery.

Additionally, the Examiner contends that the “adapted to” language in original claim 17 makes the laser separation feature of claim 17 optional. Also, the Examiner contends that there is no structure defined in the Sklar reference that would prevent the laser from being used in the manner recited in claim 17.

Sklar Reference

As admitted by the Examiner, the Sklar reference clearly does not disclose, teach or suggest any type of corneal implant. The Sklar invention is primarily for making cuts in tissue for laser surgery, and not for implantation of intracorneal inlays. Furthermore, the Sklar reference does not disclose, teach or suggest an ultrashort pulse laser used to separate the internal area of the cornea offset from the main optical axis, as recited in independent claim 17. In fact, there is no specific disclosure that the Sklar device could be used or is even capable of forming a flap, as recited in independent claim 17.

Regarding the Examiner’s statement that the adapted to language makes this feature optional, Applicant has clearly amended claim 17 to recite that the laser is used to form this type of flap. This has removed any doubt that the laser is specifically used for making and forming a flap as claimed. Therefore, Applicant submits that the prior art must disclose or teach a laser that

not only is “capable” of forming this type of flap, but the prior art must actually disclose or teach forming this type of flap.

Regarding Examiner’s statement that there is no structure that would prevent the Sklar laser from being used in the manner recited in claim 17, Applicant submits that merely because there is no recitation in the Sklar reference that a device cannot perform a function, does not mean that the reference teaches or suggests the elements in a claim.

Therefore, since there is no teaching or suggestion in the Sklar reference of a laser used to separate the internal area of the cornea in the surface of the cornea, and more precisely, there is no teaching or suggestion of a laser adapted form a flap offset from the main optical axis.

Davenport patent

Independent claim 17 further recites that a second laser is adapted to ablate a portion of an external surface of the cornea after said ocular implant is inserted in-between the first and second internal surfaces of the corneal flap. As noted above, for this feature, the Examiner relies on the Davenport patent.

The Davenport patent teaches implanting a corneal ring 47 in the stromal layer of the cornea. As described in col. 4, lines 64-68 and col. 5, lines 1-4, an incision is placed in the corneal stroma and a channel blade is inserted at the depth of the incision and a circular channel is cut in the stroma. The ring is then inserted and the ends of the ring are fastened together. There is no disclosure, teaching or suggestion in the Davenport patent of any type of short pulse laser

used as recited in claim 17, and therefore the Davenport patent does not overcome the deficiencies of the Sklar reference.

Furthermore, the type of procedure described in the Davenport patent requires tunneling through the corneal stroma for implantation of the corneal ring. The ring then generally stretches the cornea to reshape the surface of the cornea, thereby changing the cornea's refractive properties.

The Examiner again states that since claim 17 recites that the ocular implant is "adapted to" be inserted, there is nothing in this language that prevents the Davenport implant from being used in a similar manner.

Applicant respectfully disagrees and believes that this element should be given patentable weight, and therefore the prior art must disclose or teach an implant that is inserted under a flap. See MPEP §2143.03, which states that to establish *prima facie* obviousness, all the claimed limitations must be taught or suggested by the prior art.

By forming a flap and inserting the ocular implant under the flap, as recited in claim 17, there is no stretching of the cornea and therefore, less likelihood that the refractive properties of the cornea will be altered due to the tension imposed thereon, rather than mere change in curvature.

The combination of the Sklar et al. reference and the Davenport patent fails to disclose every element of the claimed invention, and therefore does establish a *prima facie* case of obviousness. The prior art references, when combined must teach or suggest all the claim

limitations to establish a *prima facie case* of obviousness. MPEP §2142. Clearly there is no teaching or suggestion of the laser being used to separate the cornea offset from the main optical axis into first and second internal surfaces to form a flap. Furthermore, there is no teaching or suggestion of an ocular implant adapted to be inserted in between the first and second internal surfaces of the corneal flap. At best, the combination of references would teach firing an excimer laser at the external surface of the cornea and inserting a ring under the surface of the cornea by forming a tunnel in the cornea.

Applicant submits that since the combination of the Sklar reference and the Davenport patent clearly does not disclose, teach or suggest all the elements of independent claim 17, claim 17 and its dependent claims 18-22 are allowable.

Double Patenting Rejection

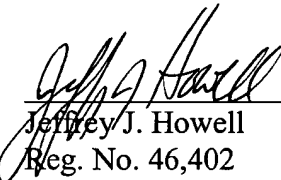
Claims 1-16 and 23-25 are rejected under the judicially created doctrine of obviousness type double patenting over claims 1-5 of U.S. Patent No. 6,217,571 to Peyman in view of U.S. Patent 4,907,586 to Bille et al. The Peyman patent is cited as disclosing all the elements of these claims, except the use of an ultrashort pulse laser. In support of the rejection, the Action states that it would have been obvious to create a stromal pocket using a laser as taught in Bille et al., since the laser leaves a smoother surface.

As suggested by the Examiner, a Terminal Disclaimer was filed in the previous response to overcome this rejection. Applicant submits that these claims should be allowable once the Disclaimer has been processed and deemed proper.

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In view of the above, it is believed that the above-identified application is in condition for allowance, and notice to that effect is respectfully requested. Should the Examiner have any questions, the Examiner is encouraged to contact the undersigned at the local telephone number indicated below.

Respectfully submitted,



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